

## STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Raymond A. Davis

Application No./Patent No.: 10/651,599

Filed/Issue Date: August 29, 2003

Entitled: APPARATUS INCLUDING A DUAL CAMERA MODULE AND METHOD OF USING THE SAME

APTINA IMAGING CORPORATION, a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; OR
2. ☐ an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Raymond A. Davis To: Agilent Technologies, Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 014195, Frame 0353, or for which a copy thereof is attached.
2. From: Agilent Technologies, Inc. To: AVAGO Technologies General IP PTE. LTD.  
The document was recorded in the United States Patent and Trademark Office at Reel 017206, Frame 0666, or for which a copy thereof is attached.
3. From: AVAGO Technologies General IP PTE. LTD. To: Citicorp North America Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 017207, Frame 0882, or for which a copy thereof is attached.
4. From: AVAGO Technologies General IP PTE. LTD. To: AVAGO Technologies Imaging IP PTE. LTD.  
The document was recorded in the United States Patent and Trademark Office at Reel 017675, Frame 0738, or for which a copy thereof is attached.
5. From: AVAGO Technologies Imaging IP PTE LTD. To: AVAGO Technologies Sensor IP PTE. LTD.  
The document was recorded in the United States Patent and Trademark Office at Reel 017675, Frame 0691, or for which a copy thereof is attached.

☒ Additional documents in the chain of title are listed on a supplemental sheet.

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 36 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
Signature

February 26, 2009

Date

Kenneth N. Nigon  
Printed or Typed Name

610-407-0700  
Telephone Number

Authorized to Act on Behalf of Assignee  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

## **STATEMENT UNDER 37 CFR 3.73(b)**

(supplemental sheet.)

6. From: AVAGO Technologies Sensor IP PTE. LTD Corp. To: AVAGO Technologies Imaging Holding Corp  
The document was recorded in the United States Patent and Trademark Office at Reel 021603, Frame 0690, or for which a copy thereof is attached.
7. From: Citicorp North America, Inc C/O CT Corporation. To: AVAGO Technologies General IP PTE. LTD.  
The document was recorded in the United States Patent and Trademark Office at Reel 21590, Frame 0866, or for which a copy thereof is attached.
8. From: AVAGO Technologies Imaging Holding Corp. To: Micron Technology, Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 018757, Frame 0159, or for which a copy thereof is attached.
9. From: AVAGO Technologies Imaging Holding Corp. To: Micron Technology, Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 09407, Frame 0441, or for which a copy thereof is attached.
6. From: Micron Technology, Inc. To: APTINA Imaging Corporation  
The document was recorded in the United States Patent and Trademark Office at Reel     , Frame     , or for which a copy thereof is attached.

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10/651,599	Apparatus including a dual camera module and method of using the same	02-24-2009::13:47:35
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## Patent Assignment Abstract of Title

**Total Assignments: 9**
**Application #:** 10651599

**Filing Dt:** 08/29/2003

**Patent #:** NONE

**Issue Dt:**
**PCT #:** NONE

**Publication #:** US20050046740

**Pub Dt:** 03/03/2005

**Inventor:** Raymond A.. Davis

**Title:** Apparatus including a dual camera module and method of using the same

**Assignment: 1**
**Reel/Frame:** 014195 / 0353

**Received:** 12/15/2003

**Recorded:** 12/15/2003

**Mailed:** 12/16/2003

**Pages:** 2

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** DAVIS, RAYMOND A.

**Exec Dt:** 08/28/2003

**Assignee:** AGILENT TECHNOLOGIES, INC.

P.O. BOX 7599

LEGAL DEPARTMENT, DL429, INTELLECTUAL PROPERTY ADMINISTRATION

LOVELAND, COLORADO 80537-0599

**Correspondent:** AGILENT TECHNOLOGIES, INC.

K LOPEZ DIANGSON, RECORDS MANAGER

IPA LEGAL DEPT. MS DL 429

815 SW 14TH STREET

LOVELAND, COLORADO 80537

**Assignment: 2**
**Reel/Frame:** 017206 / 0666

**Received:** 02/22/2006

**Recorded:** 02/22/2006

**Mailed:** 02/23/2006

**Pages:** 205

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AGILENT TECHNOLOGIES, INC.

**Exec Dt:** 12/01/2005

**Assignee:** AVAGO TECHNOLOGIES GENERAL IP PTE. LTD.

8 CROSS STREET, #11-00 PWC BUILDING

SINGAPORE, SINGAPORE 048424

**Correspondent:** AVAGO TECHNOLOGIES, LTD.

P.O. BOX 1920

DENVER, CO 80201-1920

**Assignment: 3**
**Reel/Frame:** 017207 / 0882

**Received:** 02/24/2006

**Recorded:** 02/24/2006

**Mailed:** 02/24/2006

**Pages:** 20

**Conveyance:** SECURITY AGREEMENT

**Assignor:** AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD.

**Exec Dt:** 12/01/2005

**Assignee:** CITICORP NORTH AMERICA, INC.

C/O CT CORPORATION

1209 ORANGE STREET

WILMINGTON, DELAWARE 19801

**Correspondent:** KIRSTIE HOWARD, ESQ.

SIMPSON THACHER &amp; BARTLETT LLP

425 LEXINGTON AVENUE

NEW YORK, NY 10017

**Assignment: 4**
**Reel/Frame:** 017675 / 0738

**Received:** 05/25/2006

**Recorded:** 05/25/2006

**Mailed:** 05/26/2006

**Pages:** 33

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD.

**Exec Dt:** 01/27/2006

**Assignee:** AVAGO TECHNOLOGIES IMAGING IP (SINGAPORE) PTE. LTD.

NO. 1 YISHUN AVENUE 7

SINGAPORE, SINGAPORE 768923

**Correspondent:** AVAGO TECHNOLOGIES, LTD.

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DENVER, CO 80201-1920

**Assignment: 5**
**Reel/Frame:** 017675 / 0691

**Received:** 05/25/2006

**Recorded:** 05/25/2006

**Mailed:** 05/26/2006

**Pages:** 47

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AVAGO TECHNOLOGIES IMAGING IP (SINGAPORE) PTE. LTD.

**Exec Dt:** 04/30/2006

**Assignee:** AVAGO TECHNOLOGIES SENSOR IP PTE. LTD.

NO. 1 YISHUN AVENUE 7

SINGAPORE, SINGAPORE 768923

**Correspondent:** AVAGO TECHNOLOGIES, LTD.

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**Assignment: 6**

**Reel/Frame:** 021603 / 0690      **Received:** 10/01/2008      **Recorded:** 10/01/2008      **Mailed:** 10/01/2008      **Pages:** 69

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AVAGO TECHNOLOGIES SENSOR IP PTE. LTD.

**Exec Dt:** 11/22/2006

**Assignee:** AVAGO TECHNOLOGIES IMAGING HOLDING CORPORATION  
UNIT LEVEL 13 (E) MAIN OFFICER TOWER  
FINANCIAL PARK LABUAN JALAN, MERDEKA  
LABUAN, MALAYSIA 87000

**Correspondent:** KENNETH N. NIGON  
1237 WESTLAKES DRIVE, SUITE 301  
RATNER PRESTIA  
BERWYN, PA 19312

#### **Assignment: 7**

**Reel/Frame:** 021590 / 0866      **Received:** 09/29/2008      **Recorded:** 09/29/2008      **Mailed:** 09/29/2008      **Pages:** 8

**Conveyance:** RELEASE BY SECURED PARTY (SEE DOCUMENT FOR DETAILS).

**Assignor:** CITICORP NORTH AMERICA, INC. C/O CT CORPORATION

**Exec Dt:** 12/01/2006

**Assignee:** AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD.  
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#11-00 PWC BUILDING  
SINGAPORE, SINGAPORE 048424

**Correspondent:** KENNETH N. NIGON  
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RATNER PRESTIA  
BERWYN, PA 19312

#### **Assignment: 8**

**Reel/Frame:** 018757 / 0159      **Received:** 01/09/2007      **Recorded:** 01/03/2007      **Mailed:** 01/16/2007      **Pages:** 37

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AVAGO TECHNOLOGIES IMAGING HOLDING CORPORATION

**Exec Dt:** 12/06/2006

**Assignee:** MICRON TECHNOLOGY, INC.  
800 S. FEDERAL WAY  
BOISE, IDAHO 83707-0006

**Correspondent:** THOMAS J. D'AMICO  
DICKSTEIN SHAPIRO LLP  
1825 EYE STREET, NW  
WASHINGTON, DC 20006-5403

#### **Assignment: 9**

**Reel/Frame:** 019407 / 0441      **Received:** 06/07/2007      **Recorded:** 03/07/2007      **Mailed:** 06/12/2007      **Pages:** 37

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** AVAGO TECHNOLOGIES IMAGING HOLDING CORPORATION

**Exec Dt:** 12/06/2006

**Assignee:** MICRON TECHNOLOGY, INC.  
800 S. FEDERAL WAY  
BOISE, IDAHO 83707-0006

**Correspondent:** THOMAS J. D'AMICO  
DICKSTEIN SHAPIRO LLP  
1825 EYE STREET, NW  
WASHINGTON, DC 20006-5403

Search Results as of: 02/24/2009 13:43:53 PM

#### **Disclaimer:**

**Assignment information on the assignment database reflects assignment documents that have been actually recorded.**

**If the assignment for a patent was not recorded, the name of the assignee on the patent application publication or patent may be different.**

**If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 571-272-3350**

**Close Window**

## PATENT ASSIGNMENT AGREEMENT

### 1. Definitions

(a) "Agreement" shall mean this Patent Assignment Agreement.

(b) "Assignee" shall mean **Aptina Imaging Corporation**, a Cayman Islands corporation with offices at c/o Citco Trustees (Cayman) Limited, Regatta Office Park, West Bay Road, Grand Cayman, Y1-1205, Cayman Islands.

(c) "Assignor" shall mean **Micron Technology, Inc.**, a Delaware corporation with offices at 8000 South Federal Way, Boise, ID 83707.

(d) "Effective Date" shall mean October 3, 2008.

(e)



(f)



(g) "Imaging Patents" shall mean those patents identified in ATTACHMENT "A" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(h) "Imaging Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "B" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(i) "Semiconductor Patents" shall mean those patents identified in ATTACHMENT "D" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(j) "Semiconductor Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "E" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(k) [REDACTED]

2. [REDACTED]

(a) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Imaging Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Imaging Patents to Assignee and to record assignment of the Imaging Patents to Assignee.

(b) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Imaging Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Imaging Patent Applications to Assignee.

(c) [REDACTED]

(d) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, and subject further to the restrictions on the Semiconductor Patents set out below, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Semiconductor Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Semiconductor Patents to Assignee and to record assignment of the Semiconductor Patents to Assignee.

(e) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, [REDACTED], Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Semiconductor Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Semiconductor Patent Applications to Assignee.



(f)

[REDACTED]

[REDACTED]

[REDACTED]

3 [REDACTED]

[REDACTED]

4. [REDACTED]

[REDACTED]

5. [REDACTED]

[REDACTED]

[REDACTED]

6. [REDACTED]

[REDACTED]

7. General

This Agreement shall be effective as of the Effective Date hereof and shall be binding on the respective heirs, assigns, representatives, and successors of Assignor and of Assignee.

[the rest of this page intentionally left blank]



Agreed to by:

**Micron Technology, Inc.**

Signed: \_\_\_\_\_

Date: \_\_\_\_\_, 2008

Notarization

State of Idaho

County of Ada

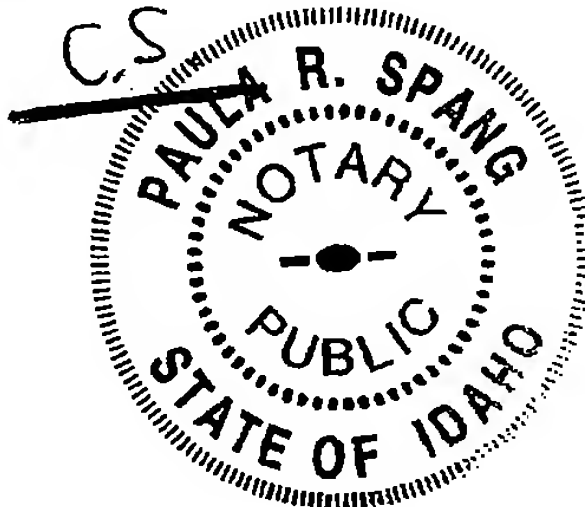
On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Steven R. Appleton

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: \_\_\_\_\_

My commission expires: 8/12/11

REVIEWED  
MTI LEGAL



Agreed to by:

**Aptina Imaging Corporation**

Signed: \_\_\_\_\_

Date: 9/26/08, 2008

Notarization

State of Idaho

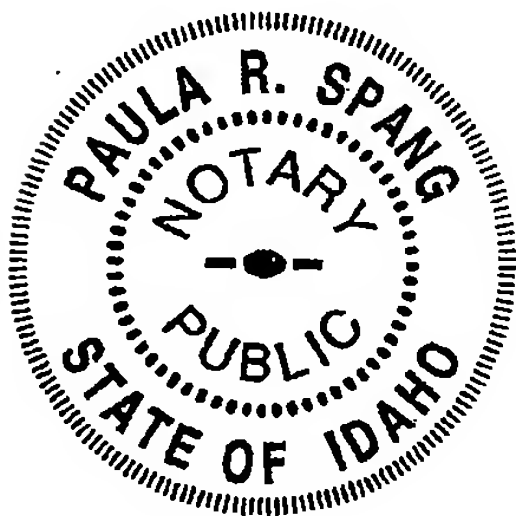
County of Ada

On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Thomas L. Lauer, Jr.

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: \_\_\_\_\_

My commission expires: 8/12/11



[Signature page to the Patent Assignment Agreement]

ATTACHMENT "A"

[REDACTED]

**ATTACHMENT "B"**



## Aptina Applications

FILE NUMBER	TITLE	STATUS	COUNTRY NAME	APPLICATION NUMBER	DATE FILED
	SOURCE/DRAIN DIFFUSION REGION				
AVGO-0065.00/DE	CMOS IMAGE SENSOR WITH ACTIVE RESET AND 4-TRANSISTOR PIXELS	Pending	Germany	103555897	Nov 28, 2003
AVGO-0065.00/JP	CMOS IMAGE SENSOR WITH ACTIVE RESET AND 4-TRANSISTOR PIXELS	Pending	Japan	2004115480	Apr 9, 2004
AVGO-0065.01/US	CMOS IMAGE SENSOR WITH ACTIVE RESET AND 4-TRANSISTOR PIXELS	Pending	United States of America	11753095	May 25, 2007
AVGO-0068.00/US	Reducing image sensor lag	Pending	United States of America	10615522	Jul 8, 2003
AVGO-0069.00/US	Digital correlated double sampling using dual analog path	Allowed	United States of America	10651597	Aug 29, 2003
AVGO-0070.00/US	Apparatus including a dual camera module and method of using the same	Pending	United States of America	10651599	Aug 29, 2003
AVGO-0071.00/JP	COMPACT PIXEL RESET CIRCUITS USING REVERSED CURRENT READOUT	Pending	Japan	P2004094176	Mar 29, 2004
AVGO-0072.00/US	Digital camera that enters a sub-sampling mode for at least one auto function	Pending	United States of America	10360188	Feb 7, 2003
AVGO-0075.00/US	Active pixel sensor array sampling system and method	Pending	United States of America	10798994	Mar 11, 2004
AVGO-0077.01/US	SAMPLE AND HOLD CIRCUIT AND ACTIVE PIXEL SENSOR ARRAY SAMPLING SYSTEM UTILIZING SAME	Pending	United States of America	12105002	Apr 23, 2008
AVGO-0079.00/CN	Circuit For An Active Pixel Sensor	Pending	China	200410070347X	Jul 29, 2004
AVGO-0079.00/DE	Circuit For An Active Pixel Sensor	Pending	Germany	10200400966279	Feb 27, 2004
AVGO-0079.00/JP	Circuit For An Active Pixel Sensor	Pending	Japan	P2004221094	Jul 29, 2004
AVGO-0079.01/US	CIRCUIT FOR AN ACTIVE PIXEL	Pending	United States of America	12061806	Apr 3, 2008
AVGO-0080.00/WO	LOW NOISE AMPLIFIER AND IMAGING ELEMENT USING	Completed	PCT	US0309160	Mar 24, 2003

ATTACHMENT "C"



ATTACHMENT "D"



**ATTACHMENT “E”**

